

Australian Standard[®]

**Underground mining—Winding
suspension equipment**

Part 4: Drawbars and connecting links

STANDARDS
Australia



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- Australasian Institute of Mining and Metallurgy
 - Australian Chamber of Commerce and Industry
 - Australian Coal Association
 - Bureau of Steel Manufacturers of Australia
 - Chamber of Minerals and Energy of Western Australia
 - Department of Infrastructure, Energy and Resources (Tasmania)
 - Department of Mineral Resources, N.S.W.
 - Department of Minerals and Energy, W.A.
 - Department of Mines and Energy (Qld)
 - Department of Natural Resources and Environment, Vic.
 - Institution of Engineers Australia
 - Institution of Mining Engineers
 - Minerals Council of Australia
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Part 4: Drawbars and connecting links

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-018, Mining Equipment, to supersede AS 3637.4—1989.

This Standard incorporates Amendment No. 1 (May 2011). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide requirements for the safe design and manufacture of drawbars and connecting links for the mining industry.

This edition includes a correction to the formula in Clause A4.1, the use of a consistent set of quantity symbols within Appendix A, and using the term ‘working load limit’ in lieu of the superseded term ‘safe working load’.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

Underground mining—Winding suspension equipment

Part 4: Drawbars and connecting links

1 SCOPE

This Standard specifies requirements for drawbars and connecting links for use with conveyances in underground vertical mine shafts.

NOTES:

- 1 Guidelines for the design of chase blocks are given in Appendix A.
- 2 Guidelines for the design of threaded components are given in Appendix B.

2 REFERENCED DOCUMENT

The following document is referred to in this Standard:

AS

3637 Underground mining—Winding suspension equipment

3637.1 Part 1: General requirements

3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

3.1 Drawbar

A mine suspension attachment connected directly to a mine conveyance and forming part of the suspension assembly of the mine conveyance from the winding rope or suspension assembly to a balance rope (see Figures 1 to 4).

3.2 Connecting link assembly

A mine suspension attachment that forms part of the suspension assembly of the shaft conveyance to the winding or balance rope, which may not be attached directly to the shaft conveyance. A connecting link assembly includes a chase block, but does not include a chain, shackles, swivel, swivel hook, rope capping device or detaching hook (see Figures 5 and 6).

4 DESIGNATION**4.1 Size**

The designated size of drawbars and connecting links shall be the working load limit in tonnes.

The designated size of any drawbar or connecting link should be of one of the following:

2.0, 5.0, 8.0, 10.0, 12.5, 15, 20, 25, 30 and 40.